

## IN THE CLAIMS

Please amend the affected claims as set forth below. Support for the proposed amendments to claim 1 may be found in the specification at, *inter alia*, page 5 in the first paragraph of the “description of the invention.” Accordingly, it is respectfully submitted that no new matter is introduced by the following amendments.

1 (Currently Amended) A UV-resistant material which comprises a molecular sieve based host-guest nano-composite which is resistant to ultraviolet radiation, wherein the host-guest nano-composite comprises a host material selected from one or more types of microbore zeolite molecular sieve materials and a guest material selected from one or more of  $\text{TiO}_2$ ,  $\text{ZnO}$ ,  $\text{CeO}_2$ , and  $\text{Fe}_2\text{O}_3$  metal oxide nano-clusters , said guest material being directional with high-order in microscopic ordered porous channels of the host material by the quantum confinement effect .

2-3 (Canceled)

4 (Withdrawn) A method of producing a UV-resistant material that has a molecular sieve based host-guest nano-composite structure which method comprises providing any one or more of  $\text{TiCl}_3$ ,  $\text{ZnCl}_2$ ,  $\text{Zn}(\text{NO}_3)_2$ ,  $\text{CeCl}_3$ ,  $\text{Ce}(\text{NO}_3)_3$ ,  $\text{FeCl}_3$ ,  $\text{Fe}(\text{NO}_3)_3$ ,  $\text{FeSO}_4$ , as the initiating material and synthesizing the formation of host-guest nano-composite materials by means of ion exchange, whereby at least one of  $\text{TiO}_2$ ,  $\text{ZnO}$ ,  $\text{CeO}_2$ , and  $\text{Fe}_2\text{O}_3$  metal oxide nano-clusters couple to the molecular sieve compound and produce a UV-resistant material.

5 (Withdrawn) The method of claim 4, wherein the ion exchange process comprises following steps:

- a) dissolving the initiating material in water,
- b) adding a molecular sieve material into the solution of step a),
- c) resting or stirring the mixture from step b) for 1-6 hours,

- d) filtering a product from the rested mixture,
- e) washing, drying, and torrefying the product from step d) for 4-24 hours at 400-600°C.

6 (Withdrawn) The method of claim 4, wherein the ion exchange process comprises following steps:

- a) dissolving the initiating material in water,
- b) adding low-silicon molecular sieve material into the solution from step a),
- c) resting the mixture from step b) for 1 hour,
- d) filtering a product from the rested mixture,
- e) subjecting the product from step d) to washing, drying at 80°C, and torrefying for 12 hours at 500°C.

7 (Withdrawn) The method of UV-resistant material of claim 1, the initiating material comprises butyl titanate and a host-guest nano-composite material having aTiO<sub>2</sub> cluster within molecular sieve material is produced by a hydrolytic reaction.

8 (Withdrawn) The method of claim 7, wherein the hydrolytic reaction comprises following steps:

- a) mixing butyl titanate with a high-silicon molecular sieve material in a non-polar solvent under inert gas shielding,
- b) refluxing and agitating the mixture from step a) for 4-48 hours at 50-100°C,
- c) washing a product from step b) with an alcohol based solvent,
- d) drying the product from step c) at 60-100°C, and
- e) torrefying the dried product for 4-24 hours at 400-600°C.

9 (Withdrawn) A cosmetic formulation that comprises the UV-resistant material of claim 1.

10 (Withdrawn)      A coating composition that comprises the UV-resistant material of claim 1.

11 (Withdrawn)      A rubber composition that comprises the UV-resistant material of claim 1.

12 (Withdrawn)      A plastic composition that comprises the UV-resistant material of claim 1.

13 (Currently Amended) The UV-resistant material of claim [[2]] 1, wherein the sieve material comprises at least one type of sieve material selected from X, Y, A, STI, and ZSM-5 type sieve materials.